



**North/West Passage
Transportation Pooled Fund Study
TPF-5(093)
Q4 2005 Status Report
October 1 – December 31, 2005**

Project Description

The North/West Passage Transportation Pooled Fund (TPF) Study is a multi-state cooperative program for the coordination, development, and deployment of Intelligent Transportation Systems (ITS) along the I-90 and I-94 corridor. The states of Washington, Idaho, Wyoming, Montana, North Dakota, South Dakota, Minnesota, and Wisconsin have been in contact since February 25, 2002 discussing the development of a North/West Passage multi-state transportation program, which was formally established as a TPF Study in 2003. North Dakota, Minnesota, and Wisconsin contributed funding for the development of a Phase 1 work plan. Additional contributions have been made by the states of Idaho, Minnesota, North Dakota, South Dakota, Washington and Wyoming for the development of a Phase 2 work plan. Wisconsin and Montana continue to express interest in the North/West Passage Corridor, but do not have funding secured to participate at this time. The Federal Highway Administration serves as a monitoring body, providing strategic and technical input. Minnesota serves as the Program Administrator and a Steering Committee consists of one representative from each of the states that have financially contributed to the effort. The Steering Committee meets monthly or as necessary to provide overall program direction.

Status/Progress This Quarter and Next Steps

Phase 1 Work Plan Projects

The North/West Passage TPF Study pursued eight projects selected and approved in December 2003 by the membership as outlined in the Work Plan – Phase 1 Projects. The purpose of the Phase 1 Projects was to implement and evaluate integrated traveler information systems and coordinate maintenance operations across state borders. The remaining Phase 1 projects were completed this quarter and a full Phase 1 interim report has been delivered to the University of Minnesota for review and final publication.

- **Project 1.1 – Integrate North Dakota, Wisconsin, and Minnesota Reporting Systems**
This project was successfully completed and travelers in North Dakota can now select to receive Minnesota's 511 traveler information. For no additional cost, this project was also able to provide travelers in South Dakota with Minnesota's 511 traveler information. An Interface Control Document (ICD) was also created to identify the process to allow the North Dakota condition reporting system (IRIS) to send data, and for the Minnesota Condition Acquisition Reporting System (CARS) system to receive the data.
- **Project 1.2 – Deploy Limited CARS Study Application for Wisconsin**
This project is complete. A summary document highlighting lessons learned from deploying limited CARS in Wisconsin District 6 was developed by Castle Rock and submitted to the Project Work Team as the final deliverable. Wisconsin DOT is intending to continue meeting internally to discuss options for proceeding with a reporting system.

- **Project 1.3 – Develop Automated Road Condition Reporting System**
 Project 1.3 was tabled in July 2003, due to the separate and ongoing Maintenance Decisions Support System (MDSS) project. This project will be revisited as appropriate during the Phase 2.
- **Project 1.4 – Provide Integrated Communications Capabilities for North Dakota DMS**
 Project 1.4 was tabled in July 2003 because North Dakota received grant money to upgrade their signs to National Transportation Communications for ITS Protocol (NTCIP) compliance. This project was successfully completed by North Dakota DOT without North/West Passage funding.
- **Project 1.5 – Preliminary Design for DMS Deployment on I-94 Eastbound in North Dakota and Project 1.8 – Develop a Communication Plan for the Anti-Icing System to be Installed on the I-94 Bridges at Red River.** The North/West Passage effort for Project 1.8 is complete. A Communication Plan and Preliminary Layouts were developed and included in the RFP for the Anti-Icing System to be deployed on the Red River Bridge. Project 1.5 shifted focus because North Dakota would not have funds in place to deploy a DMS during the duration of the project. Therefore, the Project 1.5/1.8 Work Team completed Project 1.5 by developing a Concept of Operations for the DMS to be deployed prior to the Minnesota and North Dakota border.
- **Project 1.6 – Preliminary Design for DMS Deployment at the I-94 Split at Tomah, Wisconsin**
 This project is complete. A wrap-up report of Project 1.6 including a Concept of Operations was developed as the final deliverable. The Project 1.6 Work Team agreed that prior to deploying a DMS at the Tomah split, a concept of operations document should first be developed to fit into Wisconsin's overall planning efforts.
- **Project 1.7 – Develop a North/West Passage Program Website**
 This project is complete. A website for the North/West Passage was developed as an outreach tool for the general public and an internal communication tool for project committee members (www.nwpassage.info).
- **Project 1.9 – Develop a Lessons Learned Document Comparing Requirements for CARS Deployment in Wisconsin to Meridian's System Deployment in North Dakota**
 This project is complete. A draft lessons learned report comparing road condition reporting systems throughout the country was developed. The project focus shifted because after the start of this project North Dakota DOT decided to postpone plans to deploy a reporting system.

Phase 2 Work Plan Projects

The Steering Committee will develop a full work plan identifying projects to pursue for Phase 2 in early 2006. However, the first project identified for Phase 2 will develop an ITS Integrated Corridor Strategic Plan for the North/West Passage. The Steering Committee elected to wait until the strategic plan is further developed before identifying a more complete list of projects for Phase 2.

- **Project 2.1 – ITS Integrated Corridor Strategic Plan**
 The contract for this project was awarded to the SEH Team (SEH, PB Farradyne and TranSmart Technologies) and work began in mid-October. The plan will focus on center-to-center information sharing opportunities, includes a high-level architecture for the corridor, develop an inventory of communication coverage, and identify a coordinated deployment and operational

concept for traveler information systems across state borders. The plan will also consider current ITS industry interests such as the Clarus initiative and 511.

This quarter, a draft brochure and stakeholder interview guide were completed and reviewed with the states during Strategic Plan Meeting 1 on 12/15/05. A tentative schedule for the remaining tasks and deliverables associated with the 13-month project was also shared with the states at the 12/15/05 meeting. Following is a complete list of those tasks and estimated start/finish dates.

Task	Estimated Start	Estimated Finish
1. Project Management, Administration and Coordination	Mon 10/17/05	Thu 11/30/06
2. Complete Technology Inventory	Mon 11/14/05	Thu 2/16/06
3. Identify Issues, Problems and Needs	Mon 1/16/06	Fri 3/10/06
4. Establish Goals, Objectives and Vision	Mon 1/16/06	Fri 3/10/06
5. Concepts, Potential Solutions and Desired Functions	Mon 2/13/06	Fri 4/21/06
6. Assess Technology	Mon 3/20/06	Mon 5/22/06
7. Develop Corridor Architecture	Mon 5/22/06	Wed 9/13/06
8. Identify Traveler Information and 511 System Integration	Mon 5/22/06	Tue 8/1/06
9. Identify Communication Alternatives	Mon 5/22/06	Wed 9/13/06
10. Develop Concept of Operations and Deployment Strategy	Mon 6/19/06	Thu 9/21/06
11. Prepare Strategic Plan	Mon 9/18/06	Mon 11/20/06

Next quarter, stakeholder interviews with each of the state representatives will be conducted and the results will be used as the basis of the plan's Technology Inventory chapter, which will also be completed. The Issues, Problems and Needs chapter and Goals, Objectives and Vision chapter will also be drafted next quarter. Three additional meetings are also scheduled for the next quarter to review these materials and related issues: Technical Meeting 1 (1/20/06), Strategic Plan Meeting 2 (2/23/06) and Strategic Plan Meeting 3 (3/16/06).

Phase 1 Work Plan Financial Summary

Current member commitments for Phase 1 Projects total \$100,000.

- North Dakota \$25,000 (SP&R Dollars)
- Minnesota \$50,000 (SP&R Dollars)
- Wisconsin \$25,000 (80/20 I-90/94 Earmark Dollars)

Phase 2 Work Plan Financial Summary

Six of the eight states in the corridor have committed \$300,000 in total for a Phase 2 Work Plan. Following is a summary of financial contributions by members through December 31, 2005. Because funding is comprised of various state and federal sources, FMIS will track SP&R dollars and Mn/DOT will administer and track other state and federal dollars through partnership agreements with the corresponding states.

- Idaho \$50,000 (Federal Dollars)
- Minnesota \$50,000 (SP&R Dollars-Not Yet Obligated)

- Montana-Not Yet Committed
- North Dakota \$50,000 (SP&R Dollars-Partially Obligated)
- South Dakota \$50,000 (SP&R Dollars-Not Yet Obligated)
- Washington \$50,000 (State Dollars)
- Wisconsin-Not Yet Committed
- Wyoming \$50,000 (Federal Dollars)

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